## PATENT ABSTRACTS OF JAPAN

(11) Publication number:

56-048413

(43) Date of publication of application: 01.05.1981

(51)Int.CI.

E02B 3/04

// E02D 5/02

(21) Application number: 54-123129

(71) Applicant: PENTA OCEAN CONSTR CO

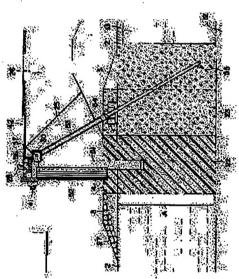
(22) Date of filing:

27.09.1979

(72)Inventor: HIRATA MASAAKI

**INOUE KAZUSHI** 

## (54) HARBOR STRUCTURE SUCH AS QUAY WALL ON A CEMENT BLENDED FOUNDATION AND CONSTRUCTION METHOD THEREOF



## (57) Abstract:

PURPOSE: To eliminate waste from both the lower structure and the upper structure structural-dynamically by a method wherein a half cellular steel structural material is entirely, directly connected to a soil cement retaining wall to form an one body structure. CONSTITUTION: Laying sand 3 is laid evenyl on the sea bottom 2. Next, a hardened soil cement column body A is molded in the sea bottom by means of a disposing ship. Multi-king posts 51 are erected into this soil cement column body by means of a pile hammering ship. And further, for the cement column body A, a skew rope steel material 53 is fitted to a king post hanger 56 with a hinge. At this time, a skew rope steel tube pile 55 of the lower skew rope extension part has been already positioned through the taper hole of a skew rope steel material bed plate 54. Two shew rope tube piles 55 are hammered by means of a pile hammering ship to complete a series of the skew rope steel material laying operation. On the other hand, on land, a tentative

assembly of a flat steel plate 52 is performed and it is lowered into the laying channel excavated in a solid wall body 22, and further, it is filled with under water correte, and then, the root part of a flat steel sheet pile is fixed sufficiently in the wall body 22 to finish the construction of the principal part.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office